

HISTORIC PROPERTY INVENTORY FORM

IDENTIFICATION SECTION

Field Site No. 300 Area Process Ponds OAHF No. _____ Date Recorded 28-Apr-99
Site Name Historic 300 Area Process Ponds
Common _____
Field Recorder Jim Sharpe
Owner's Name U.S. Department of Energy, Richland Operations Office
Address P.O. Box 550
City/State/Zip Code Richland, WA 99352

Status

☒ Survey/Inventory
☐ National Register
☐ State Register
☐ Determined Eligible
☐ Determined Not Eligible
☐ Other (HABS, HAER, NHL)
☐ Local Designation

Photography

Photography Neg. No. 67334-33
(Roll No. & Frame No.)
View of _____
Date _____

Classification ☐ District ☐ Site ☐ Building ☒ Structure ☐ Object
District Status ☒ NR ☐ SR ☐ LR ☐ INV
Contributing ☒
District/Thematic Nomination Name Hanford Site Manhattan Project and Cold War Historic District

Description Section

Materials & Features/Structural Types

Building Type Industry
Plan _____
Structural System Pond
No. of Stories _____

Roof Type

☐ Gable ☐ Hip
☐ Flat ☐ Pyramidal
☐ Monitor ☒ Other (specify) Pond
☐ Gambrel
☐ Shed

Cladding (exterior Wall Surfaces)

☐ Log
☐ Horizontal Wood Siding
Rustic/Drop ☐
Clapboard ☐

☐ Wood Shingle
☐ Board and Batten
☐ Vertical Board
☐ Asbestos/Asphalt
☐ Brick
☐ Stone
☐ Stucco
☐ Terra Cotta
☐ Concrete/Concrete Block
☐ Vinyl/Aluminum Siding
☐ Metal (specify) _____
☒ Other (specify) existing natural geologic deposits

Roof Material

☐ Wood Shingle
☐ Wood Shake
☐ Composition
☐ Slate
☐ Tar/Built-up
☐ Tile
☐ Metal (specify) _____
☒ Other (specify) open pond
☐ Not visible

Foundation

☐ Log ☐ Concrete
☐ Post & Pier ☐ Block
☐ Stone ☐ Poured
☐ Brick ☒ Other (specify) existing natural geologic deposits
☐ Not visible

Integrity

(Include detailed description in
Description of Physical Appearance)

	Intact	Slight	Moderate	Extensive
Changes to plan	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Changes to windows	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Changes to original cladding	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Changes to interior	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other (specify) see page 2	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

State of Washington, Department of Community Development
Office of Archaeology and Historic Preservation
111 21st Avenue Southwest, Post Office Box 48343
Olympia, Washington 98504-8343 (206)753-4011

LOCATION SECTION

Address North and South Process Ponds, 300-Area
City/Town/County/Zip Code Richland/Benton County/99352
Twp 10 Range 28E Section 2 W 1/2 1/4 1/4 Sec
Tax No./Parcel No. Acreage
Quadrangle or map name Ric hland, WA. 1992
UTM References Zone 11 Easting 325150 Northing 5138900
Plat/Block/Lot
Supplemental Map(s)



High Styles/Forms (Check one or more of the following)

<input type="checkbox"/> Greek Revival	<input type="checkbox"/> Spanish Colonial Revival/Mediterranean
<input type="checkbox"/> Gothic Revival	<input type="checkbox"/> Tudor Revival
<input type="checkbox"/> Italianate	<input type="checkbox"/> Craftsman/Arts & Crafts
<input type="checkbox"/> Second Empire	<input type="checkbox"/> Bungalow
<input type="checkbox"/> Romanesque Revival	<input type="checkbox"/> Prairie Style
<input type="checkbox"/> Stick Style	<input type="checkbox"/> Art Deco/Art Moderne
<input type="checkbox"/> Queen Anne	<input type="checkbox"/> Rustic Style
<input type="checkbox"/> Shingle Style	<input type="checkbox"/> International Style
<input type="checkbox"/> Colonial Revival	<input type="checkbox"/> Northwest Style
<input type="checkbox"/> Beaux Arts/Neoclassical	<input type="checkbox"/> Commercial Vernacular
<input type="checkbox"/> Chicago/Commercial Style	<input type="checkbox"/> Residential Vernacular (see below)
<input type="checkbox"/> American Foursquare	<input checked="" type="checkbox"/> Other (specify)
<input type="checkbox"/> Mission Revival	<input type="checkbox"/> Ponds in existing geogogic deposits

Vernacular House Types

<input type="checkbox"/> Gable Front	<input type="checkbox"/> Cross Gable
<input type="checkbox"/> Gable Front and Wing	<input type="checkbox"/> Pyramidal/Hipped
<input type="checkbox"/> Side Gable	<input checked="" type="checkbox"/> Other (specify)
	Does not apply

NARRATIVE SECTION

Study Unit Themes (check one or more of the following)

- ☐ Agriculture
- ☐ Architecture/Landscape Architecture
- ☐ Arts
- ☐ Commerce
- ☐ Communications
- ☐ Community Planning/Development

- ☐ Conservation
- ☐ Education
- ☐ Entertainment/Recreation
- ☐ Ethnic Heritage (specify) _____
- ☐ Health/Medicine
- ☐ Manufacturing/Industry
- ☐ Military

- ☐ Politics/Government/Law
- ☐ Religion
- ☐ Science & Engineering
- ☐ Social Movements/Organizations
- ☐ Transportation
- ☒ Other (specify) Manhattan Project & Cold War Era
- ☒ **Study Unit Sub-Theme(s)** Waste Management (liquid)

Statement of Significance

Date of Construction South Pond 1943. North Pond 1948 Architect/Engineer/Builder _____

- ☒ In the opinion of the surveyor, this property appears to meet the criteria of the National Register of Historic Places.
- ☒ In the opinion of the surveyor, this property is located in a potential historic district (National and/or local).

The 300 Area Process Ponds were located in the 300 Area of the Hanford Site. The Process Ponds included the North and South Ponds located about 3 miles north of Richland, Washington and about 300 feet west of the Columbia River. The South Pond was the first pond constructed to process liquid waste for the 300 Area. The two ponds were almost identical in design and used for the disposal of chemically and radioactively contaminated industrial wastewaters. While in operation, the ponds operated as a series of basins that consisted of three small settling basins followed by two large basins. The ponds were designed so that no discharge occurred and all water either evaporated or infiltrated into the ground. The ponds were designed to allow liquid waste materials to enter the first of the settling basins and flow to the remaining basins by overflowing through flumes constructed in the top 15 foot of the dikes. This operating procedure removed suspended and particulate contamination in the settling basins. While in operation the ponds received combined flows ranging from 400,000 to 3,000,000 gallons per day. The ponds were occasionally dredged to improve infiltration. Following deactivation in 1975, the dikes that separated the settling basins and the west infiltration basin in the South Process Pond were partially removed and the ponds were used for filter backwash from the 315 Water Treatment Facility.

It is the conclusion of the U.S. Department of Energy that the 300 Area Process Ponds, through their role in liquid waste management, are eligible for inclusion in the National Register of Historic Places under Criterion A as a contributing property within the Hanford Site Manhattan Project and Cold War Era Historic District.

Description of Physical Appearance

The South Pond (316-1) covered about 8.1 acres and operated from 1943-1975. It contained three small settling basins and two large basins. The pond failed in 1948 resulting in an unplanned release. The pond failure resulted in the creation of the North Process Pond. The inlet to the South Pond was initially located at the southwest corner, but in 1953 the addition of a new process sewer created the need to relocate the inlet to the northwest corner. It received liquid wastes from the 313, 314, 32, and 3706 Buildings, small quantities of organic wastes containing uranium, water from fuel processing floor drains, and aqueous wastes from laboratories.

The North Pond (316-2) The North Pond was constructed as a replacement facility for the South Pond following the failure of the dike near the northeast corner of the South Pond. The failure was later repaired and both ponds were used alternately and simultaneously until 1975. It covered about 10 acres and operated from 1948-1975. The North Pond contained three small settling basins and one large basin. The settling basins were replaced in 1961 or 1962. The original basins were used for sediment disposal. The inlet for the North Pond was in the southwest corner.

Remediation activities for both ponds is expected to be completed by the year 2001.

Major Bibliographic References

Pacific Northwest Laboratory. 1987. *Level 1 Remedial Investigation Work Plan 300 Area Process Ponds*. PNL-7251. Richland, Washington.

Pacific Northwest Laboratory. 1989. *Status Report on Remedial Investigation of the 300 Area Process Ponds*. PNL-6442. Richland, Washington.

Pacific Northwest Laboratory. 1991. *Addendum to Data Compilation Task Report for the Source Investigation of the 300-FF-1 Operable Unit Phase 1 Remedial Investigations*. EMO-1026. Richland, Washington.

U. S. Department of Energy. 1990. *Remedial Investigation/Feasibility Study Work Plan for the 300-FF-1 Operable Unit, Hanford Site, Richla* DOE/RL-88-31. Richland, Washington.